

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 59107019  
PUBLICATION DATE : 21-06-84

APPLICATION DATE : 09-12-82  
APPLICATION NUMBER : 57216165

APPLICANT : NIPPON STAINLESS STEEL CO LTD;

INVENTOR : YAMAZAKI KATSUO;

INT.CL. : C21D 6/00 // C22C 38/46

TITLE : PRODUCTION OF TWO PHASE STAINLESS CAST STEEL PRODUCT OF HIGH CR AND LOW NI HAVING EXCELLENT SEA WATER RESISTANCE

ABSTRACT : PURPOSE: To suppress efficiently the deposition of a  $\sigma$  phase and to produce stably a cast steel product having excellent sea water resistance by charging a molten high Cr low Ni stainless steel having a specific component compsn. into a casting mold, knocking out the mold at a specific temp. after solidification and cooling quickly the steel.

CONSTITUTION: A molten high Cr low Ni stainless steel contg., by wt%,  $\leq 0.05\%$  C,  $\leq 2.0\%$  Si,  $\leq 2.0\%$  Mn, 22.0~30.0% Cr, 4.0~11.0% Ni, 0.5~5.0% Mo, 0.10~ 0.60% Cu,  $\leq 0.04\%$  P,  $\leq 0.03\%$  S,  $\leq N$ , and further contg. 1 kind of 0.05~ 1.50% W or 0.05~1.50% V, and consisting of the balance Fe with inevitable impurities is charged into a casting mold and is solidified. The mold is knocked out while the molten steel is in the high temp. state before cooling down to a temp. region of  $<1,000^{\circ}\text{C}$  and the steel is immediately and quickly cooled. The two phase stainless cast steel product having excellent sea water resistance is thus mass-produced easily at a low cost.

COPYRIGHT: (C)1984,JPO&Japio